

PATENT  
Docket No. 150.01150103

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Sandhu	)	Group Art Unit:	Unassigned
	)		
Serial No.: 10/771,043	)	Examiner:	Unassigned
Confirmation No.: Unassigned	)		
	)		
Filed: February 3, 2004	)		
	)		
For: DETECTION DEVICES, METHODS AND SYSTEMS FOR GAS PHASE			
MATERIALS			

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with C.F.R. §§ 1.97 *et. seq.*, the materials enclosed herewith are brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. Per M.P.E.P. § 609, the information cited in the present Information Disclosure Statement shall not be construed to be an admission that the information is, or is considered to be, material to patentability. Consideration of each of the documents listed on the attached 1449 forms is respectfully requested. As this patent application was filed after June 30, 2003, copies of the U.S. patents and U.S. patent application publications listed on the attached 1449 forms have not been submitted. Pursuant to the provisions of M.P.E.P. §609, Applicant further requests that a copy of the 1449 forms, marked as being considered and initialed by the Examiner, be returned with the next Official Communication.

This application is a continuation of U.S. Patent Application Serial No. 10/266,797, filed October 8, 2002, which is a continuation of U.S. Patent Application Serial No. 09/652,634, filed August 31, 2000 and issued as U.S. Patent No. 6,479,297 on November 12, 2002. In accordance with 37 C.F.R. §1.98(d), copies of documents previously cited by or

**Information Disclosure Statement**

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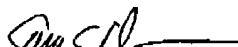
submitted to the U.S. Patent and Trademark Office in connection with Applicant's prior application(s) listed above, are not included herewith.

It is believed that no fee is due, as this Information Disclosure Statement is filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

The Examiner is invited to contact Applicant's Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

**CERTIFICATE UNDER 37 C.F.R. 1.8:**

The undersigned hereby certifies that this paper is being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office, addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 29<sup>th</sup> day of April, 2004, at 3:20 p.m. (Central Time).

  
Name: GINA E. OLSON

29 APRIL 2004

Date

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OMB No. 0651-0011  
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	<b>Application Filing Date:</b> February 3, 2004	<b>Group:</b> Unassigned
	Information Disclosure Statement mailed:	April 29, 2004

**U.S. PATENT DOCUMENTS**

Examiner Initial	Copy Enclosed	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
		3,585,073	06/15/71	Veenstra et al.			
		3,890,703	06/75	Frazee et al.			
		4,433,320	02/21/84	Murata et al.			
		4,442,422	04/10/84	Murata et al.			
		4,677,416	06/30/87	Nishimoto et al.			
		4,911,892	03/27/90	Grace et al.			
		5,147,737	09/15/92	Post et al.			
		5,331,287	07/19/94	Yamagishi et al.			
		5,337,018	08/09/94	Yamagishi			
		5,756,879	05/26/98	Yamagishi et al.			
		5,857,250	01/12/99	Riley et al.			
		5,906,726	05/25/99	Schneider et al.			
		6,280,604	08/28/01	Allen et al.			
		6,436,246	08/20/02	Sandhu			
		6,479,297	11/12/02	Sandhu			
		6,689,321	02/10/04	Sandhu			
		US 2003/0138958	07/24/03	Blalock			

**FOREIGN PATENT DOCUMENTS**

Examiner Initial	Copy Enclosed	Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
		1,151,482	05/07/69	Great Britain				
		1,576,658	08/01/69	France (w/abstract)				X

**EXAMINER****Date Considered**

\* Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		2-293644	12/04/90	Japan (w/abstract)				X
		386,660	09/12/90	EP (w/abstract)				X
		3-48748	03/01/91	Japan (w/abstract)				X
		60-210752	10/85	Japan (w/abstract)				X
		2-69658	03/90	Japan				X

**OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)**

Examiner Initial	Copy Enclosed	Document Description
		Aizenshtein et al., "Method of measurement of the rate of deposition of pure metals from the gas phase," <i>Chem. Abstr.</i> , 1966; 64: abstract 1747e.
		Aizenshtein et al., "Method of Measuring Rate of Pure Metals Deposition from the gas phase," <i>Tsvetnye Metally The Soviet Journal of Non-Ferrous Metals</i> , 6(9): 72-74.
		Bardin et al., "Voltammetry of Ruthenate, Determination of Ruthenium from the Electrochemical Reduction of Ruthenium," <i>Journal of Analytical Chemistry of the USSR</i> , 1975;30: 642-645.
		Bates, J.R. et al., "The influence of the electrodeposition parameters on the morphology of organo-transition metal complexes for thin film gas sensor application", <i>Thin Solid Films</i> , 1997;299: 18-24.
		Brown et al., "New method for the characterization of domain morphology of polymer blends using ruthenium tetroxide staining and low voltage scanning electron microscopy (LVSEM)," <i>Polymer</i> , 1997; 38(15): 3937-3945,
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		Kawahara et al., "(Ba, Sr)TiO <sub>3</sub> Films Prepared by Liquid Source Chemical Vapor Deposition on Ru Electrodes," <i>J. Appl. Phys.</i> , 1996;35: 4880-4885.
		Koda et al., "Radioactivation determination of ruthenium," <i>Chem Abstr</i> , 1979;90: abstract 114382q.

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		Koda et al., "Radioactivation determination of ruthenium," <i>Kyoto Daigaku Genshiro Jikkensho Gakujutsu Koenkai Koen Yoshishu</i> , 1976; 10: 25-27.
		Kolesov et al., "Role of surface moisture of samples in the determination of volume resistivity of polymers," <i>Chem Abstr</i> , 1989; 110: abstract 213848j.
		Li et al., "RuO <sub>4</sub> Staining and Lamellar Structure of α- and β-PP," <i>J. Appl. Polym. Sci.</i> , 1999; 72: 1529-1538.
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		Morgunov et al., "Evaluation of the film structure imperfections from electric conductivity by the statistical analysis of data," <i>Chem Abstr</i> , 1982; 96: abstract 105113z.
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		Provo, J.L., "Film-thickness resistance monitor for dynamic control of vacuum-deposited films," <i>J. Vac. Sci. Technol.</i> , July/Aug 1975; 12(4): 946-952.
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		Shabasy et al., "Electrical properties of thin metal zinc films," <i>Journal of Material Science</i> , 1990; 25: 585-588.
		Schepis et al., "Influence of deposition rates and thickness on the electrical resistivity and thermoelectric power of thin iron films," <i>Thin Solid Films</i> , 1994; 251: 99-102.
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		Takayama et al., "Gas-Sensitive Ag Ion Conduction in Semiconducting ZnO Thin Films," <i>Solid State Ionics</i> , 1989; 35: 411-415.
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		Trent et al., "Ruthenium Tetraoxide Staining of Polymers for Electron Microscopy," <i>Macromolecules</i> , 1983; 16: 589-598.
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		Tyutnev et al., "Concerning the Radiation-Induced Surface Conductivity in Polymers," <i>Phys. Status Solidii A</i> , 1984;86: 709-716.
		Watari et al., "Present status of volatile ruthenium in analytical chemistry and health physics," <i>Chem Abstr</i> , 1987;106:abstract 91861c.
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		Yuan et al., "Low-Temperature Chemical Vapor Deposition of Ruthenium Dioxide from Ruthenium Tetroxide: A Simple Approach to High Purity RuO <sub>2</sub> Films," <i>Chem Mater</i> , 1993; 5: 908-910.

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